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***START OF THE PROJECT GUTENBERG EBOOK THE HISTORY OF INSECTS***

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a b c d e f g h i j k l m n o
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*A B C D E F G H I J K L*
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# THE HISTORY OF INSECTS.



**And God made every thing that creepeth upon the earth. Gen. 1. 25.**

**NEW-YORK:**
**PRINTED AND SOLD BY SAMUEL WOOD,**
**At the Juvenile Book-store,**
**No. 357, Pearl-street.**

**1813.**

Observe the insect race, ordained to keep
The silent sabbath of a half year's sleep!
Entom'd beneath the filmy web they lie
And wait the influence of a kinder sky;
When vernal sunbeams pierce the dark retreat,
The heaving tomb distends with vital heat;
The full formed brood, impatient of their cell,
Start from their trance, and burst their silken shell.

BARBAULD.

---

# THE HISTORY OF INSECTS.

Insects are so called from a separation in the middle of their bodies, seemingly cut into two parts, and joined together by a small ligature, as we see in wasps and common flies.

However small and contemptible this class of beings may appear, at first thought, yet, when we come to reflect, and carefully investigate, we shall be struck with wonder and astonishment, and shall discover, that the smallest gnat that buzzes in the meadow, is as much a subject of admiration as the largest elephant that ranges the forest, or the hugest whale which ploughs the deep; and when we consider the least creature that we can imagine, myriads of which are too small to be discovered without the help of glasses, and that each of their bodies is made up of different organs or parts, by which they receive or retain nourishment, &c. with the power of action, how natural the exclamation, O "Lord, how manifold are thy works! in wisdom hast thou made them all." Under these considerations, that they are the work of the same great, good, and Almighty hand that formed us, and that they are all capable of feeling pleasure and pain, surely every little child, as well as older person, ought carefully to avoid every kind of cruelty to any kind of creature, great or small.

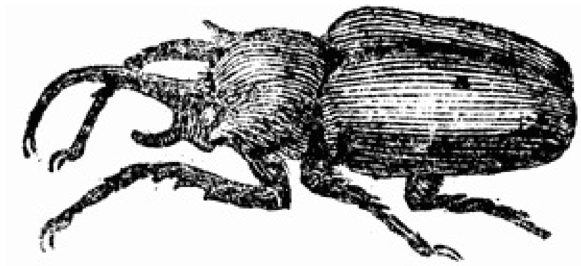
The supreme court of Judicature at Athens punished a boy for putting out the eyes of a poor bird; and parents and masters should never overlook an instance of cruelty to any thing that has life, however minute, and seemingly contemptible the object may be.

"I would not enter on my list of friends
(Though grac'd with polish'd manners, and fine sense,

Yet wanting sensibility) the man
Who needlessly sets foot upon a worm."

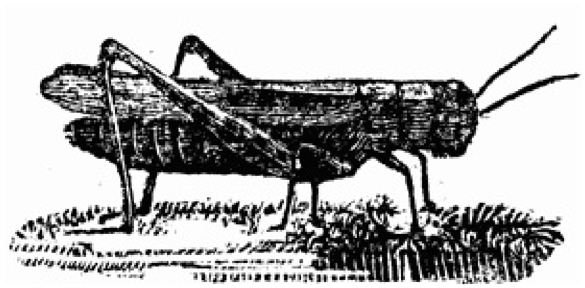
COWPER.

# ELEPHANT-BEETLE.



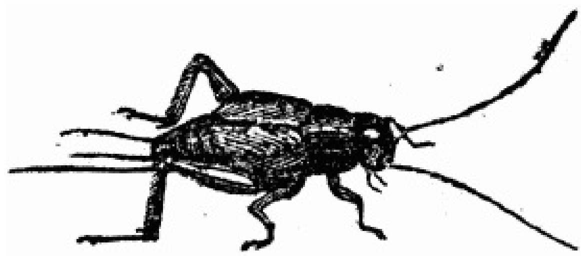
The elephant-beetle is the largest of this kind hitherto known, and is found in South America, particularly in Guiana, about the rivers Surinam and Oroonoko. It is of a black colour, and the whole body is covered with a shell, full as thick and as strong as that of a small crab. There is one preserved in the museum that measures more than six inches.

# GRASSHOPPER.



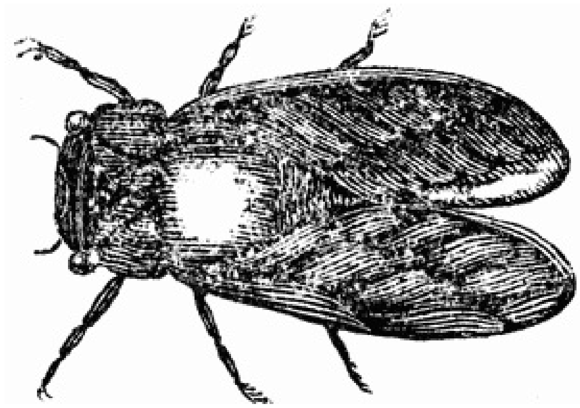
Grasshoppers are too common to need description, as they abound almost wherever there is green grass. One summer only is their period of life; they are hatched in the spring, and die in the fall; previous to which, they deposite their eggs in the earth, which the genial warmth of the next season brings to life. They are food for many of the feathered race.

# CRICKET.



There are two classes of crickets: viz. the field cricket, and the house cricket; the latter inhabits warm places, the holes of the hearth, &c. from whence we hear its notes, which are agreeable: it is said, that they are purchased by some, and kept in a kind of cage, for the sake of their music. Field crickets inhabit the meadows, and subsist on roots, &c. as does another species, called the mole cricket.

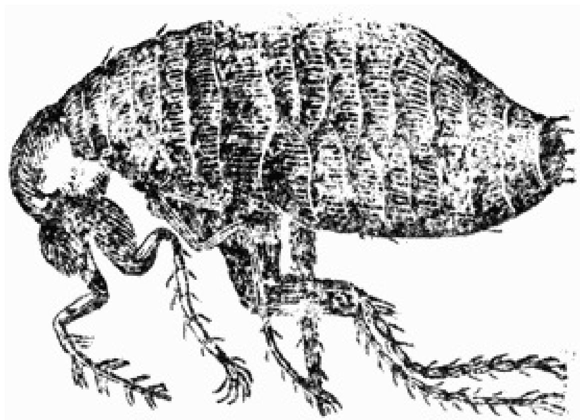
# LOCUST.



There are different kinds of the locust; those we are acquainted with, in this country, are represented in the above cut. In some seasons, they are scarcely heard at all; in others, they are more numerous. About the middle or latter part of summer, we hear them among the leaves of the trees: their notes, which are continued about the space of one minute, are loud at the beginning, and grow lower and lower, till they cease; when they immediately fly to another tree, begin again, and end in the same way, and so on.

In the eastern countries, a kind or kinds of locust, at different periods, have been very numerous, and have done abundance of damage. In the year 1650, a cloud of locusts entered Russia, in three different places; and from thence spread over Poland and Lithuania; the air was darkened, and the earth covered, in some places, to the depth of four feet; the trees bent with heir weight, and the damage sustained exceeded computation. Locusts were among the plagues of Egypt: sec Exodus, x. 15.

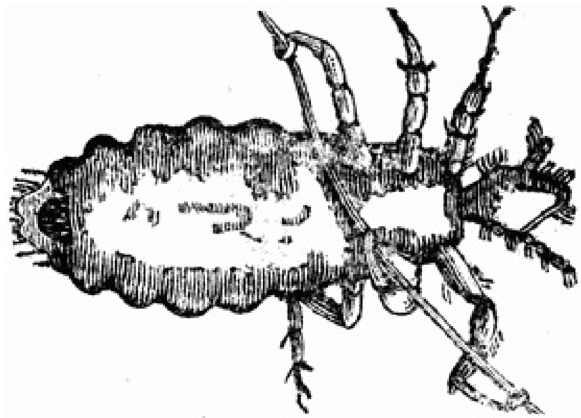
# FLEA.



This very troublesome little animal multiplies very fast among old rags, dirt, straw, and litter, where hogs, cats, or dogs sleep; and in the hair and bristles of those creatures: therefore, as a means of avoiding such unwelcome neighbours, in the springs the cleanly farmer scrapes up the rubbish about his woodpile, and around his house and barn, and removes it into his field, where it also repays him by manuring his lands. They abound in warm countries, particularly in the southern parts of France and Italy.

When examined by a microscope, the flea is a pleasant object. The body is curiously adorned with a suit of polished armour, neatly jointed, and beset with a great number of sharp pins almost like the quills of a porcupine: it has a small head, large eyes, two horns, or feelers, which proceed from the head, and four long legs from the breast; they are very hairy and long, and have several joints, which fold as it were one within another.

# LOUSE.

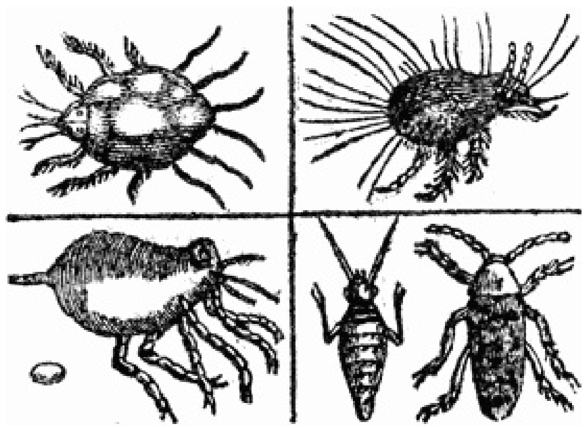


These loathsome animals, however unwelcome, attend in troops, and add to the afflictions of the unfortunate and lazy; but they are routed by the hand of industry and cleanliness.

In examining the louse with a microscope, its external deformity strikes us with disgust. It has six feet, two eyes, and a sort of sting, proboscis, or sucker, with which it pierces the skin, and sucks the blood. The skin of the louse is hard and transparent, with here and there several bristly hairs: at the end of each leg are two claws, by which it is enabled to lay hold of the hairs, on which it climbs. There is scarcely any animal known to multiply so fast as this unwelcome intruder: from an experiment of Lieuenhoek, a louse in eight weeks, may see five thousand of its descendants.

Among the ancients, what is called the lousy disease was not uncommon: Antiochus, Herod, and others are said to have died of this disorder.

# ITCH ... MITE ... CHEGO ... DEATHWATCH.

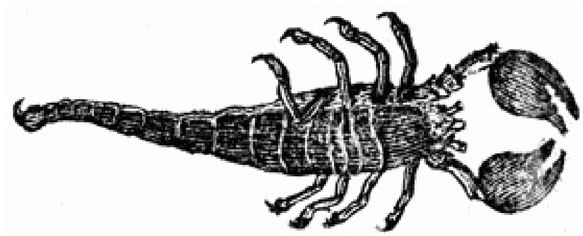


There are many species of mites, beside the itch animal and mite above: to the naked eye, they appear like moving particles of dust: but the microscope discovers them to be perfect animals, having as regular a figure, and performing all the functions of life as perfectly as creatures that exceed them many times in bulk: their eggs are so small that a regular computation shews that 90 millions of them are not so large as a common Pigeon's egg.

The Chego is a very small animal, about one fourth the size of a common flea: it is very troublesome, in warm climates, to the poor blacks, such as go barefoot, and the slovenly: it penetrates the skin, under which it lays a bunch of eggs, which swell to the bigness of a small pea.

The Deathwatch, of which there are two kinds, is an insect famous for a ticking noise, like a watch, which superstitious people take for a presage of death, in the family where it is heard.

# SCORPION.



This is one of the largest of the insect tribe. It is met with in different countries, and of various sizes, from two or three inches to nearly a foot in length: it somewhat resembles a lobster, and casts its skin, as the lobster does its shell.

Scorpions are common in hot countries: they are very bold and watchful: when any thing approaches, they erect their tails, and stand ready to inflict the direful sting. In some parts of Italy and France, they are among the greatest pests that plague mankind: they are very numerous, and are most common in old houses, in dry or decayed walls, and among furniture, insomuch that it is attended with, much danger to remove the same: their sting is generally a very deadly poison, though not in all cases, owing to a difference of malignity of different animals, or some other cause.

In the time of the children of Israel, scorpions were a plague in Egypt and Canaan, as appears by the sacred writings. See Deuteronomy, viii. 15, and other passages.

# ANTS.



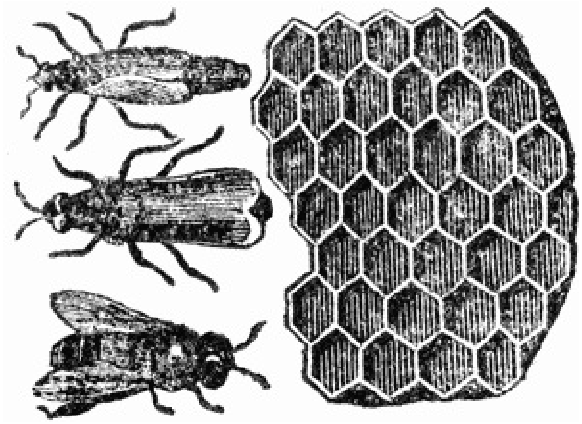
'Who can observe the faithful ant,
And not provide for future want.'

These little animals have been for ages considered as patterns of industry: they were specially noticed by the wise king Solomon. He says, "go to the ant, thou sluggard, consider her ways, and be wise." The ant lays eggs in the manner of common flies; from these eggs are hatched small maggots, or worms without legs; these, after a short time, change into large white aureliae, or chrysales, which are usually called ant's eggs. When a nest of these creatures is disturbed, however great their own danger, the care they take of their offspring is remarkable: each takes in its foreceps, a young one, often larger than itself and carries it off.

These little insects form to themselves, with much industry and application, of earth, sticks, leaves, &c. little hillocks, called ant-hills, in the form of a cone: in these, they dwell, breed, and deposite their stores: they are commonly built in woody places: the brushy plains on Long-Island abound with them: they are from one to two feet in

height.

# HONEY-BEE.

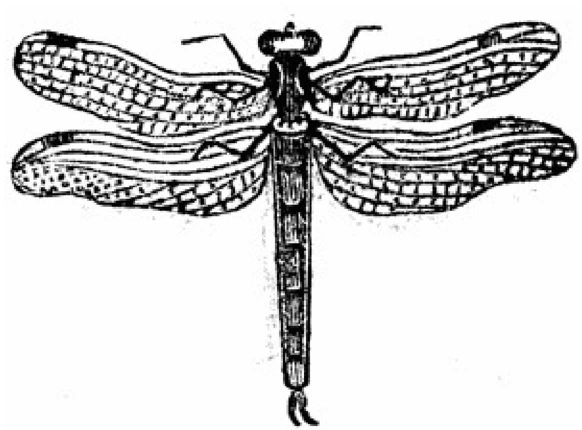


This is an extraordinary, curious, and remarkably industrious little insect, to which mankind are indebted for one of the most palatable and wholesome sweets which nature affords; and which was one of the choice articles with which the promised land was said to abound.

In every hive of bees, there are three kinds; the queen, the drones, and the labourers: of these last, there are by far the greatest number: and as cold weather approaches, they drive from the hives and destroy the drones, that have not laboured in summer, and will not let them eat in winter. If bees are examined through a glass hive, all appears at first like confusion: but, on a more careful inspection, every animal is found regularly employed. It is very delightful, when the maple and other trees are in bloom, or the clover in the meadows, to be abroad and hear their busy hum.

"Brisk as the busy bee among learning's flowers.
Employ thy youthful sunshine hours."

# DRAGON FLY.



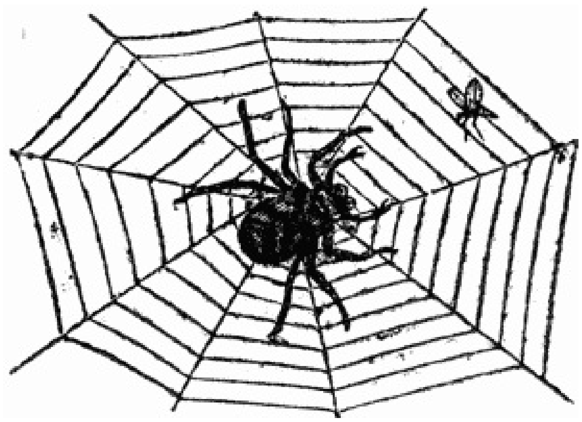
Of these flies, which are called by many Spindles, there are various species. They all have two very large eyes, covering the whole surface of the head. They fly very swiftly, and prey upon the wing, clearing the air of innumerable little flies. The great ones live about water, but the smaller are common among hedges, and about gardens.

# BUTTERFLY.



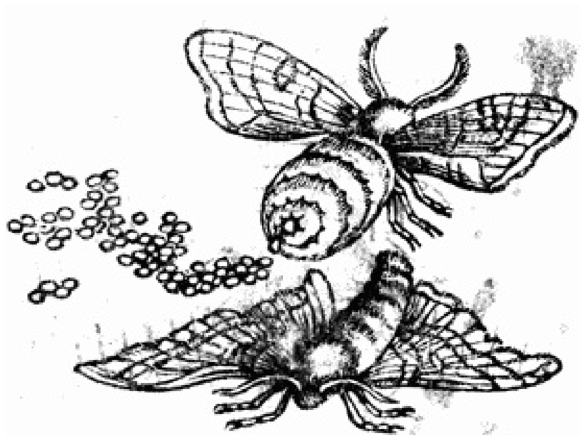
Of butterflies there are many kinds. How wonderful the various changes of this class of insects! The butterflies lay their eggs: from these hatch out worms or caterpillars, which change their skins several times, and, finally, become aureliae, chrysales, or silkworms, out of which come the beautiful butterflies.

# SPIDER.

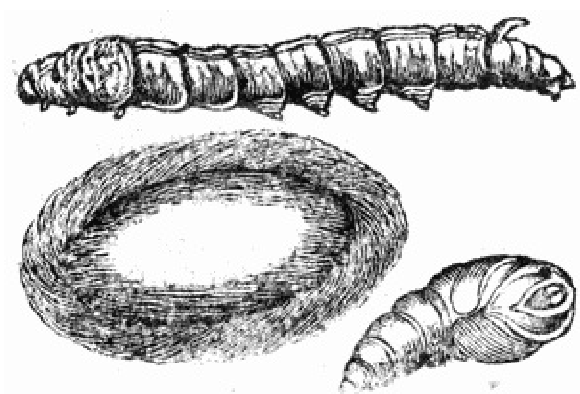


There are many kinds of spiders; some of which are said to grow to such a size that they will catch small birds: some are poisonous, but the greater part are harmless, although to most people their looks are disgusting. The web of a spider, which is a net for catching its prey, is an astonishing piece of curiosity.

# SILK WORM



The silk worm is a very valuable insect: it is produced from an egg of a yellowish colour, about the size of a small pin's head, that is laid by a moth, or butterfly. The above cut represents a male and female, and her eggs, of which she lays several hundreds: the moths live but a few days; they never eat, and die directly after the eggs are laid.



This cut shews the appearance of the worm, which at first is very small and black. Its food is the leaves of the white mulberry: as it grows in size, at four different periods, it apparently sickens, and changes its skin, and finally, when full grown, it spins a ball of silk, called a cone, or cocoon, the thread of which is about three hundred

yards long: in the centre of this ball the worm entombs itself, and experiences a change to a state called an aurelia, or chrysallis, as seen below the ball: from this aurelia, the moth that lays the eggs is hatched, and thus goes on the round of this animal's changes, or transmigrations.

They are natives of China, and were brought into Italy, above twelve hundred years ago; from thence into Spain; afterwards into France; much later into Germany and the northern countries; and some have been reared in the United States of America.

# SAMUEL WOOD

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